

CLAIMS

1. A directional microphone assembly comprising:

- 5 - a surface part having at least two inlet holes for sound,
- a microphone having at least two sound inlets,
- means for transporting sound from each inlet hole to a respective sound inlet,

characterised in that the transporting means are hollow and at least substantially rigid.

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2. An assembly according to claim 1, wherein the inner diameter of the hollow transporting means are dimensioned in such a way that the frequency response of the transporting means are optimised.

15 3. An assembly according to claim 1, wherein damper grids are placed on an inner surface of the mean for transporting sound to the inlet, which is acting as a sound passage for front volume

4. An assembly according to claim 1, wherein the diameter of the at least two inlet holes for
20 sound are dimensioned according to a required directionality.

5. An assembly according to claim 1, wherein the transporting means are attachable or attached to the microphone.

25 6. An assembly according to claim 1, wherein at least one of the transporting means comprise a sound-delaying filter.

7. An assembly according to claim 1, for use in a hearing aid.

30 8. A hearing aid comprising:

- a surface part having at least two inlet holes for sound,
- a microphone having at least two sound inlets,
- hollow and at least substantially rigid means for transporting sound from each inlet
35 hole to a respective sound inlet.

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9. A hearing aid according to claim 8, wherein the inner diameter of the hollow transporting means are dimensioned in such a way that the frequency response of the transporting means are optimised.

5 10. A hearing aid according to claim 8, wherein damper grids are placed on an inner surface of the mean for transporting sound to the inlet, which is acting as a sound passage for front volume.

11. A hearing aid according to claim 8, wherein the diameter of the at least two inlet holes for
10 sound are dimensioned according to a required directionality.

12. A hearing aid according to claim 8, wherein the transporting means are attachable or attached to the microphone.

15 13. A hearing aid according to claim 8, wherein at least one of the transporting means comprises an acoustical sound-delaying filter.

14. A microphone assembly for use in the hearing aid according to claim 8, the assembly comprising:

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- a microphone having at least two sound inlets,
- hollow and at least substantially rigid means attached to the microphone and being adapted to transport sound from predetermined positions to a respective sound inlet.

25 15. An assembly according to claim 14, wherein the inner diameter of the hollow transporting means are dimensioned in such a way that the frequency response of the transporting means are optimised.

16. An assembly according to claim 14, wherein damper grids are placed on an inner
30 surface of the mean for transporting sound to the inlet which is acting as a sound passage for front volume.

17. A hearing aid according to any of claims 14, wherein the diameter of the at least two inlet holes for sound are dimensioned according to a required directionality.

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18. An assembly according to any of claims 14, wherein the transporting means are adapted to abut or engage an element defining the surface part having sound inlet holes, the transporting means abutting or engaging the element at sound inlet holes thereof.

5 19. An assembly according to any of claims 14, wherein at least one of the transporting means comprises an acoustical sound-delaying filter.

20. An assembly according to any of claims 14, wherein the sound-delaying filter is adapted to delay sound by a period of time at least substantially corresponding to a distance between
10 two predetermined positions divided by the velocity of sound in air at sea level.

21. An assembly according to any of claims 14, wherein the acoustical sound-delaying filter is adapted to provide a sound delay corresponding to 0.33-0.57 times a distance between two inlet holes in the surface part divided by the speed of sound.

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